

CLAIMS:

1. A locking mechanism for a linear actuator comprising a piston rod arranged for generally linear
5 movement between a fully retracted state and a fully extended state, the locking mechanism comprising a piston follower coupled to the piston rod for movement therewith, and a latching member moveable between a non-locked state and at least one locked state in which
10 the latching member obstructs the movement of the piston follower such that the piston rod is prevented from adopting the fully retracted state.
2. A locking mechanism as claimed in Claim 1, wherein
15 the latching member is pivotable with respect to the actuator.
3. A locking mechanism as claimed in Claim 1, wherein the latching member is biased to adopt a locked state.
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4. A locking mechanism as claimed in Claim 1, wherein the latching member includes a plurality of bearing surfaces, each arranged for engagement with the piston follower, or a respective part thereof, in a respective
25 locked state, and wherein the location of each bearing surface in the respective locked state is arranged to halt the movement of the piston rod at a respective state of extension between the fully extended and fully retracted states.
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5. A locking mechanism as claimed in Claim 1, wherein the latching member includes one or more catching surfaces arranged to engage with the piston follower as

the latching member moves towards the, or a respective, locked state so that the, or a respective, bearing surface is held in the path of the piston follower.

- 5 6. A locking mechanism as claimed in Claim 1, wherein the locking mechanism further includes one or more secondary actuators arranged to actuate the latching member, or a respective part thereof, from the at least one locked state to the non-locked state.

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7. A locking mechanism as claimed in Claim 6, wherein the linear actuator and the or each secondary actuator are inter-linked so that they may each be operated by a common operating circuit.

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8. A locking mechanism as claimed in Claim 7, wherein the common operating circuit is operable in a first mode, in which the piston rod of linear actuator is caused to extend, a second mode, in which the piston
20 rod of the linear actuator is caused to retract and the respective piston rods of the or each secondary actuator are caused to extend, or a third mode, in which the respective piston rods of both the linear and secondary actuators extend.

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9. A locking mechanism as claimed in Claim 6, wherein the linear actuator comprises a double acting actuator having a piston chamber divided into a retract side and an extend side by a piston, the retract side being
30 inter-linked with the, or each, secondary actuator so that operating fluid may be supplied to the, or each, secondary actuator from said retract side to cause the

respective piston rods of the, or each, secondary actuator to extend.

10. A locking mechanism as claimed in Claim 9 when
5 dependent on Claim 8, wherein said third mode of operation is effected by supplying operating fluid, under pressure, to both sides of the linear actuator simultaneously.

10 11. A linear actuator comprising a piston rod, arranged for generally linear movement between a fully retracted state and a fully extended state, and a locking mechanism as claimed in Claim 1.

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